

125W Dual Output Switching Power Supply

RID-125 series



■ Features :

- Isolated output & GND for CH1,CH2
- AC input range selectable by switch
- Withstand 300VAC surge input for 5 seconds
- Protections: Short circuit / Overload / Over voltage
- All using 105°C long life electrolytic capacitors
- Withstand 5G vibration test
- LED indicator for power on
- 100% full load burn-in test
- High reliability
- 3 years warranty



SPECIFICATION

MODEL		RID-125-1224		RID-125-1248		RID-125-2448	
OUTPUT	OUTPUT NUMBER	CH1	CH2	CH1	CH2	CH1	CH2
	DC VOLTAGE	12V	24V	12V	48V	24V	48V
	RATED CURRENT	3.7A	3.7A	2.3A	2.3A	2A	2A
	CURRENT RANGE Note.6	1 ~ 7A	0.4 ~ 5A	1 ~ 7A	0.2 ~ 2.5A	0.5 ~ 4A	0.2 ~ 2.5A
	RATED POWER Note.6	133.2W		138W		144W	
	RIPPLE & NOISE (max.) Note.2	120mVp p	200mVp p	120mVp p	240mVp p	200mVp p	240mVp p
	VOLTAGE ADJ. RANGE	CH1: 11.4 ~ 13.2V		CH1: 11.4 ~ 13.2V		CH1: 22.8 ~ 26.4V	
	VOLTAGE TOLERANCE Note.3	±2.0%	+8, 5%	±2.0%	+8, 5%	±1.0%	±4.0%
	LINE REGULATION Note.4	±0.5%	±1.0%	±0.5%	±1.0%	±0.5%	±1.0%
	LOAD REGULATION Note.5	±1.0%	±5.0%	±1.0%	±5.0%	±1.0%	±3.0%
SETUP, RISE TIME		500ms, 20ms/230VAC 1200ms, 30ms/115VAC at full load					
HOLD UP TIME (Typ.)		36ms/230VAC 30ms/115VAC at full load					
INPUT	VOLTAGE RANGE	88 ~ 132VAC / 176 ~ 264VAC selected by switch 248 ~ 373VDC(300VAC peak 5sec. No damage)					
	FREQUENCY RANGE	47 ~ 63Hz					
	EFFICIENCY(Typ.)	85%		85%		86%	
	AC CURRENT (Typ.)	3A/115VAC 2A/230VAC					
	INRUSH CURRENT (Typ.)	COLD START 40A/230VAC					
LEAKAGE CURRENT		<2mA / 240VAC					
PROTECTION	OVERLOAD	110 ~ 150% rated output power					
		Protection type : Hiccup mode, recovers automatically after fault condition is removed					
	OVER VOLTAGE	CH1: 13.8 ~ 16.2V		CH1: 13.8 ~ 16.2V		CH1: 27.6 ~ 32.4V	
Protection type : Hiccup mode, recovers automatically after fault condition is removed							
ENVIRONMENT	WORKING TEMP.	20 ~ +70℃ (Refer to "Derating Curve")					
	WORKING HUMIDITY	20 ~ 90% RH non condensing					
	STORAGE TEMP., HUMIDITY	40 ~ +85℃, 10 ~ 95% RH					
	TEMP. COEFFICIENT	±0.03%/℃ (0 ~ 50℃)on CH1 output					
	VIBRATION	10 ~ 500Hz, 5G 10min./1cycle, period for 60min. each along X, Y, Z axes					
SAFETY & EMC (Note 7)	SAFETY STANDARDS	UL60950 1, TUV EN60950 1 approved					
	WITHSTAND VOLTAGE	I/P O/P:3KVAC I/P FG:2KVAC O/P FG:0.5KVAC					
	ISOLATION RESISTANCE	I/P O/P, I/P FG, O/P FG:100M Ohms / 500VDC / 25℃/ 70% RH					
	EMC EMISSION	Compliance to EN55032 (CISPR32) Class B, EN61000 3 2, 3					
OTHERS	EMC IMMUNITY	Compliance to EN61000 4 2,3,4,5,6,8,11, EN61000 6 2 (EN50082 2), heavy industry level, criteria A					
	MTBF	218.2Khrs min. MIL HDBK 217F (25℃)					
	DIMENSION	199*98*38mm (L*W*H)					
	PACKING	0.7Kg; 20pcs/15Kg/0.8CUFT					
NOTE	1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25℃ of ambient temperature. 2. Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair wire terminated with a 0.1uf & 47uf parallel capacitor. 3. Tolerance : includes set up tolerance, line regulation and load regulation. 4. Line regulation is measured from low line to high line at rated load. 5. Load regulation is measured from 20% to 100% rated load, and other output at 60% rated load. 6. Each output can work within current range. But total output power can't exceed rated output power. 7. The power supply is considered a component which will be installed into a final equipment. All the EMC tests are been executed by mounting the unit on a 360mm*360mm metal plate with 1mm of thickness. The final equipment must be re confirmed that it still meets EMC directives. For guidance on how to perform these EMC tests, please refer to "EMI testing of component power supplies." (as available on http://www.meanwell.com) 8. Length of set up time is measured at cold first start. Turning ON/OFF the power supply very quickly may lead to increase of the set up time.						

1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature.
2. Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair wire terminated with a 0.1uF & 47uF parallel capacitor.
3. Tolerance : includes set up tolerance, line regulation and load regulation.
4. Line regulation is measured from low line to high line at rated load.
5. Load regulation is measured from 20% to 100% rated load, and other output at 60% rated load.
6. Each output can work within current range. But total output power can't exceed rated output power.
7. The power supply is considered a component which will be installed into a final equipment. All the EMC tests are been executed by mounting the unit on a 360mm*360mm metal plate with 1mm of thickness. The final equipment must be re confirmed that it still meets EMC directives. For guidance on how to perform these EMC tests, please refer to "EMI testing of component power supplies." (as available on <http://www.meanwell.com>)
8. Length of set up time is measured at cold first start. Turning ON/OFF the power supply very quickly may lead to increase of the set up time.

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Note: all features are subject to change without notice.

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■ Features :

- Isolated output & GND for CH1,CH2
- AC input range selectable by switch
- Withstand 300VAC surge input for 5 seconds
- Protections: Short circuit / Overload / Over voltage
- 170% peak load for CH1
- All using 105°C long life electrolytic capacitors
- Withstand 5G vibration test
- LED indicator for power on
- 100% full load burn-in test
- High reliability
- 3 years warranty

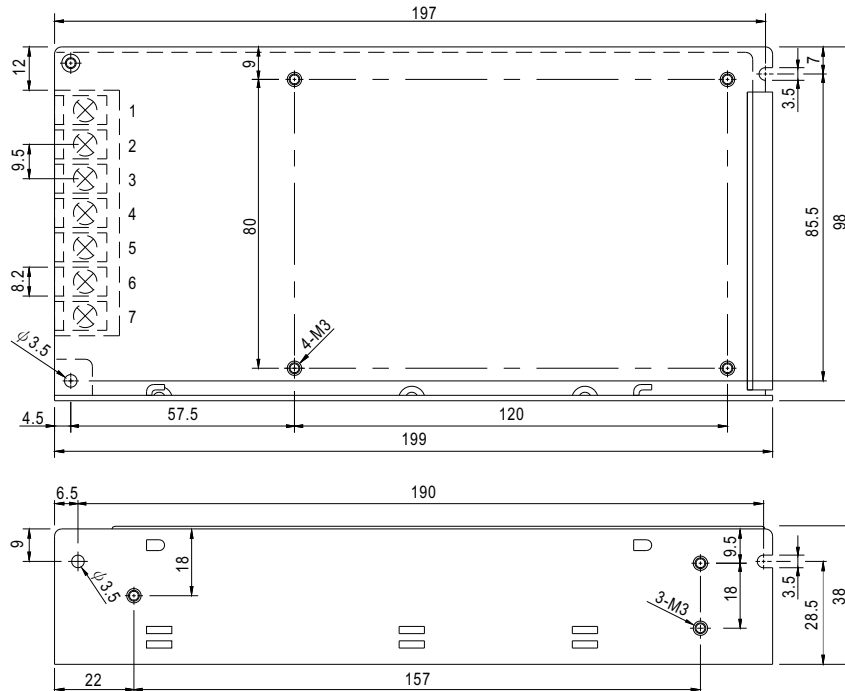


SPECIFICATION

MODEL		RID-125-1205		RID-125-2405	
OUTPUT	OUTPUT NUMBER	CH1	CH2	CH1	CH2
	DC VOLTAGE	12V	5V	24V	5V
	RATED CURRENT	9.2A	3A	4.6A	3A
	CURRENT RANGE	Note.6 2 ~ 10.5A	0 ~ 3A	2 ~ 5.3A	0 ~ 3A
	PEAK LOAD	Note.9 15.6A	3A	7.8A	3A
	RATED POWER	125.4W		125.4W	
	RIPPLE & NOISE (max.)	Note.2 120mVp p	80mVp p	120mVp p	80mVp p
	VOLTAGE ADJ. RANGE	CH1: 11.4 ~ 13.2V		CH1: 22.8 ~ 26.4V	
	VOLTAGE TOLERANCE	Note.3 ± 2.0%	± 3.0%	± 2.0%	± 3.0%
	LINE REGULATION	Note.4 ± 0.5%	± 0.5%	± 0.5%	± 0.5%
	LOAD REGULATION	Note.5 ± 1.0%	± 2.0%	± 1.0%	± 2.0%
	SETUP, RISE TIME	500ms, 20ms/230VAC 1200ms, 30ms/115VAC at full load			
	HOLD UP TIME (Typ.)	35ms/230VAC 30ms/115VAC at full load			
INPUT	VOLTAGE RANGE	88 ~ 132VAC / 176 ~ 264VAC selected by switch 248 ~ 373VDC(300VAC peak 5sec., no damage)			
	FREQUENCY RANGE	47 ~ 63Hz			
	EFFICIENCY(Typ.)	80%		83%	
	AC CURRENT (Typ.)	3A/115VAC 2A/230VAC			
	INRUSH CURRENT (Typ.)	COLD START 40A/230VAC			
	LEAKAGE CURRENT	<2mA / 240VAC			
PROTECTION	OVERLOAD	>165% rated output power Protection type : Hiccup mode, recovers automatically after fault condition is removed			
	OVER VOLTAGE	CH1: 13.8 ~ 16.2V		CH1: 27.6 ~ 32.4V	
		Protection type : Hiccup mode, recovers automatically after fault condition is removed			
ENVIRONMENT	WORKING TEMP.	25 ~ +70℃ (Refer to "Derating Curve")			
	WORKING HUMIDITY	20 ~ 90% RH non condensing			
	STORAGE TEMP., HUMIDITY	40 ~ +85℃, 10 ~ 95% RH			
	TEMP. COEFFICIENT	±0.03%/℃ (0 ~ 50℃)on CH1 output			
	VIBRATION	10 ~ 500Hz, 5G 10min./1cycle, period for 60min. each along X, Y, Z axes			
SAFETY & EMC (Note 7)	SAFETY STANDARDS	UL60950 1, TUV EN60950 1 approved			
	WITHSTAND VOLTAGE	I/P O/P:3KVAC I/P FG:2KVAC O/P FG:0.5KVAC			
	ISOLATION RESISTANCE	I/P O/P, I/P FG, O/P FG:100M Ohms / 500VDC / 25℃ / 70% RH			
	EMC EMISSION	Compliance to EN55032 (CISPR32) Class B, EN61000 3 2, 3			
	EMC IMMUNITY	Compliance to EN61000 4 2,3,4,5,6,8,11, EN61000 6 2 (EN50082 2), heavy industry level, criteria A			
OTHERS	MTBF	218.2Khrs min. MIL HDBK 217F (25℃)			
	DIMENSION	199*98*38mm (L*W*H)			
	PACKING	0.7Kg; 20pcs/15Kg/0.8CUFT			
NOTE	1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25℃ of ambient temperature. 2. Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair wire terminated with a 0.1uf & 47uf parallel capacitor. 3. Tolerance : includes set up tolerance, line regulation and load regulation. 4. Line regulation is measured from low line to high line at rated load. 5. Load regulation is measured from 20% to 100% rated load, and other output at 60% rated load. 6. Each output can work within current range. But total output power can't exceed rated output power. 7. The power supply is considered a component which will be installed into a final equipment. All the EMC tests are been executed by mounting the unit on a 360mm*360mm metal plate with 1mm of thickness. The final equipment must be re confirmed that it still meets EMC directives. For guidance on how to perform these EMC tests, please refer to "EMI testing of component power supplies." (as available on http://www.meanwell.com) 8. Length of set up time is measured at cold first start. Turning ON/OFF the power supply very quickly may lead to increase of the set up time. 9. 10% duty cycle maximum within every second. Average output power should not exceed the rated power.				

Case No. 902A Unit:mm

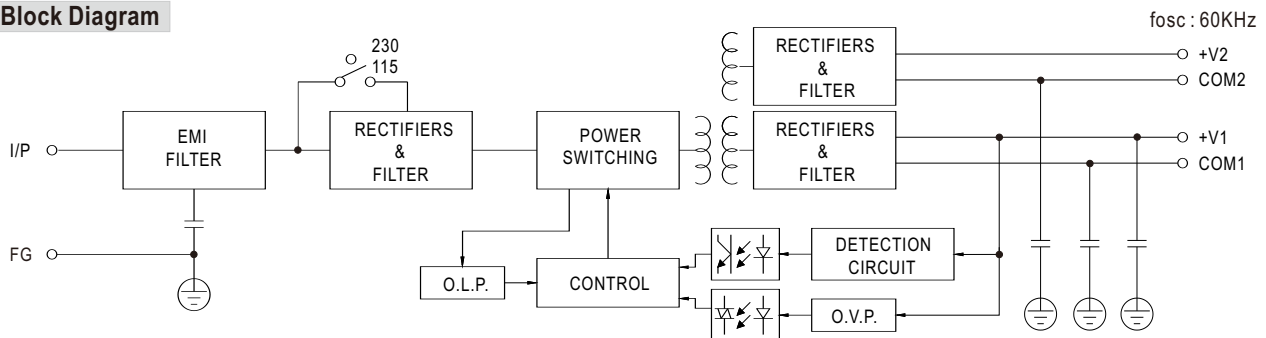
Mechanical Specification



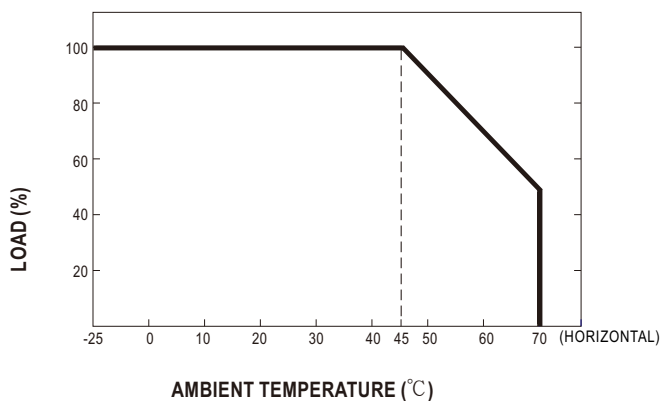
Terminal Pin No. Assignment

Pin No.	Assignment	Pin No.	Assignment
1	AC/L	5	DC OUTPUT +V2
2	AC/N	6	DC OUTPUT COM1
3	FG	7	DC OUTPUT +V1
4	DC OUTPUT COM2		

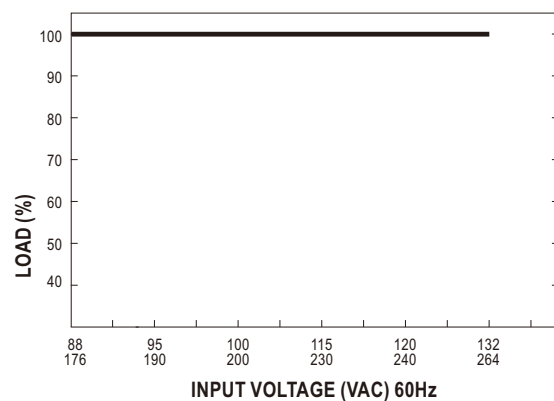
Block Diagram



Derating Curve



Static Characteristics



File Name:RID-125-SPEC 2017-07-14